

**Global Solar Radiation on a Horizontal Surface  
Hourly Integrated and Daily Totals  
Watt-Hours per Square Meter  
Savannah State College - July 1999**

Field: GHI

Hour Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	3	37	230	348	215	170	365	392	420	617	293	306	95	12	2	0	0	0	0	3505
2	0	0	0	0	0	15	110	247	594	753	129	749	927	888	778	666	417	325	90	8	0	0	0	0	6696
3	0	0	0	0	0	15	148	307	188	583	643	902	956	697	829	518	437	230	106	8	0	0	0	0	6566
4	0	0	0	0	0	7	42	304	476	598	881	744	866	970	866	740	535	313	120	8	0	0	0	0	7469
5	0	0	0	0	0	15	113	317	514	726	709	808	608	703	816	705	518	313	116	8	0	0	0	0	6989
6	0	0	0	0	0	11	126	306	508	691	808	733	651	730	662	138	96	61	22	4	0	0	0	0	5547
7	0	0	0	0	0	18	132	329	484	605	655	944	970	926	859	715	506	319	113	6	0	0	0	0	7581
8	0	0	0	0	0	12	126	319	528	712	825	896	977	663	453	670	505	212	66	6	0	0	0	0	6971
9	0	0	0	0	0	5	92	301	488	657	818	926	657	640	635	493	425	299	108	8	0	0	0	0	6552
10	0	0	0	0	0	11	128	320	533	688	867	903	850	854	670	620	505	93	31	20	0	0	0	0	7094
11	0	0	0	0	0	5	122	327	512	651	748	779	848	125	490	379	344	191	30	1	0	0	0	0	5553
12	0	0	0	0	0	9	90	135	184	339	856	763	331	99	16	17	46	66	51	5	0	0	0	0	3006
13	0	0	0	0	0	3	78	155	248	160	230	196	261	344	281	437	475	267	25	0	0	0	0	0	3161
14	0	0	0	0	0	2	43	136	186	410	482	981	513	412	382	51	143	125	45	5	0	0	0	0	3914
15	0	0	0	0	0	4	55	219	503	743	510	411	132	756	241	56	209	198	64	6	0	0	0	0	4106
16	0	0	0	0	0	4	92	296	425	142	95	35	37	117	259	443	352	149	72	8	0	0	0	0	2527
17	0	0	0	0	0	8	69	167	345	515	696	961	863	514	413	689	527	260	31	2	0	0	0	0	6059
18	0	0	0	0	0	8	88	152	481	500	814	1052	1090	595	612	502	89	28	13	2	0	0	0	0	6025
19	0	0	0	0	0	4	53	90	128	198	180	256	753	417	397	411	342	272	108	5	0	0	0	0	3614
20	0	0	0	0	0	7	105	298	506	697	794	666	799	900	832	608	455	257	85	6	0	0	0	0	7016
21	0	0	0	0	0	6	95	249	451	633	800	891	894	822	723	572	452	286	73	4	0	0	0	0	6950
22	0	0	0	0	0	5	82	245	392	589	783	636	689	510	496	233	230	163	24	3	0	0	0	0	5079
23	0	0	0	0	0	5	93	250	435	619	727	677	563	826	793	647	457	237	75	5	0	0	0	0	6411
24	0	0	0	0	0	4	92	268	450	666	718	911	844	884	847	679	426	276	85	1	0	0	0	0	7150
25	0	0	0	0	0	6	75	140	259	546	492	799	727	750	328	373	399	154	28	4	0	0	0	0	5081
26	0	0	0	0	0	5	96	285	497	689	839	927	959	929	858	697	467	219	74	2	0	0	0	0	7543
27	0	0	0	0	0	5	93	244	479	685	772	869	957	905	815	573	443	264	75	2	0	0	0	0	7181
28	0	0	0	0	0	5	86	225	405	613	758	869	883	849	803	681	445	255	88	3	0	0	0	0	6965
29	0	0	0	0	0	4	78	243	451	652	800	893	826	843	761	642	446	219	77	1	0	0	0	0	6935
30	0	0	0	0	0	3	95	277	479	669	806	912	940	923	800	618	445	233	98	3	0	0	0	0	7301
31	0	0	0	0	0	3	81	269	475	653	700	818	851	897	795	643	452	235	84	2	0	0	0	0	6958
Avg	0	0	0	0	0	7	91	247	418	568	648	751	730	674	617	500	384	213	67	5	0	0	0	0	5920
S/D	0	0	0	0	0	4	27	66	120	174	236	244	259	253	229	211	136	81	33	4	0	0	0	0	1517
S/A	0	0	0	0	0	0.59	0.3	0.27	0.29	0.31	0.36	0.32	0.35	0.38	0.37	0.42	0.35	0.38	0.49	0.8	0	0	0	0	0.26
Min	0	0	0	0	0	2	37	90	128	142	95	35	37	99	16	17	46	28	12	0	0	0	0	0	2527
Max	0	0	0	0	0	18	148	329	594	753	881	1052	1090	970	866	740	535	325	120	20	0	0	0	0	7581

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 5222 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: SS
Latitude: 32.03° N
Longitude: 81.07° W
Elevation: 11 Meters AMSL
Time Zone: -5

Instrument: PSP
Calibration Constant: 7.98 uV/Wm-2
Serial Number: 28401F3
Calibration Date: 5/19/98

**Direct Normal Solar Radiation  
Hourly Integrated and Daily Totals  
Watt-Hours per Square Meter  
Savannah State College - July 1999**

Field: DNI

Hour Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	20	20	59	68	31	22	51	62	75	170	49	72	26	5	0	0	0	0	0	731
2	0	0	0	0	0	21	127	242	547	595	15	481	716	640	568	651	432	491	203	15	0	0	0	0	5746
3	0	0	0	0	0	34	702	480	63	421	449	651	795	424	701	367	443	260	191	17	0	0	0	0	5999
4	0	0	0	0	0	11	25	327	525	376	745	468	566	693	745	734	673	545	256	17	0	0	0	0	6706
5	0	0	0	0	0	33	154	502	646	761	500	558	315	414	655	742	672	528	258	11	0	0	0	0	6747
6	0	0	0	0	0	18	184	425	560	633	610	321	333	419	341	21	19	17	13	4	0	0	0	0	3917
7	0	0	0	0	0	34	219	461	394	386	382	686	735	742	781	734	652	567	267	7	0	0	0	0	7048
8	0	0	0	0	0	27	237	511	673	760	746	713	752	381	195	597	595	230	31	65	0	0	0	0	6513
9	0	0	0	0	0	9	100	370	468	550	675	723	360	354	430	394	454	412	193	26	0	0	0	0	5518
10	0	0	0	0	0	39	336	578	743	737	807	758	610	624	463	575	603	109	23	54	0	0	0	0	7059
11	0	0	0	0	0	21	304	588	696	610	527	415	457	18	174	120	217	91	9	10	0	0	0	0	4257
12	0	0	0	0	0	15	47	39	37	58	448	497	92	9	2	2	9	21	29	9	0	0	0	0	1312
13	0	0	0	0	0	5	43	46	50	23	28	22	28	38	36	84	365	215	8	15	0	0	0	0	1007
14	0	0	0	0	0	4	23	40	39	68	195	627	252	139	162	7	28	28	23	14	0	0	0	0	1649
15	0	0	0	0	0	11	29	95	526	590	244	106	13	400	92	6	118	172	68	10	0	0	0	0	2480
16	0	0	0	0	0	9	101	311	272	61	11	4	4	12	34	109	124	36	75	16	0	0	0	0	1181
17	0	0	0	0	0	28	40	48	148	394	489	654	593	175	77	495	575	340	16	3	0	0	0	0	4074
18	0	0	0	0	0	24	70	116	566	273	517	870	856	345	310	351	16	7	6	1	0	0	0	0	4328
19	0	0	0	0	0	6	31	27	23	32	26	27	201	47	79	212	342	448	291	9	0	0	0	0	1800
20	0	0	0	0	0	14	224	500	669	755	692	428	563	672	652	466	391	256	83	5	0	0	0	0	6369
21	0	0	0	0	0	18	72	210	389	479	592	608	549	457	377	284	268	225	40	6	0	0	0	0	4574
22	0	0	0	0	0	18	46	163	231	408	527	318	259	155	183	44	52	43	15	6	0	0	0	0	2468
23	0	0	0	0	0	16	68	223	359	405	422	248	185	442	524	495	383	224	59	15	0	0	0	0	4065
24	0	0	0	0	0	11	95	309	436	555	456	526	476	661	670	596	402	333	99	7	0	0	0	0	5634
25	0	0	0	0	0	21	47	29	47	218	81	319	237	348	89	120	175	68	18	11	0	0	0	0	1829
26	0	0	0	0	0	18	167	436	622	731	778	784	783	734	729	676	486	171	39	10	0	0	0	0	7164
27	0	0	0	0	0	9	73	244	521	634	617	675	745	702	595	302	414	351	125	2	0	0	0	0	6009
28	0	0	0	0	0	16	65	167	286	432	500	530	536	510	519	524	388	267	84	8	0	0	0	0	4831
29	0	0	0	0	0	16	47	223	413	561	598	629	498	504	490	479	386	170	54	3	0	0	0	0	5071
30	0	0	0	0	0	13	86	346	561	685	714	775	780	777	696	534	386	181	124	3	0	0	0	0	6659
31	0	0	0	0	0	13	38	206	446	549	360	514	590	687	640	583	452	215	74	20	0	0	0	0	5388

Avg	0	0	0	0	0	18	123	268	388	444	444	483	450	406	393	366	342	227	90	13	0	0	0	0	4456
S D	0	0	0	0	0	9	135	177	228	239	247	243	259	248	254	248	205	166	88	14	0	0	0	0	2055
S/A	0	0	0	0	0	0.5	1.09	0.66	0.59	0.54	0.56	0.5	0.58	0.61	0.65	0.68	0.6	0.73	0.98	1.07	0	0	0	0	0.46
Min	0	0	0	0	0	4	20	27	23	23	11	4	4	9	2	2	9	7	5	0	0	0	0	0	731
Max	0	0	0	0	0	39	702	588	743	761	807	870	856	777	781	742	673	567	291	65	0	0	0	0	7164

Daylight Data Recovery: 2% missing; 0% exceed the 15% QC threshold -- 138835 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: SS  
 Latitude: 32.03° N  
 Longitude: 81.07° W  
 Elevation: 11 Meters AMSL  
 Time Zone: -5

Instrument: Estimated DNI  
 Calibration Constant: 0.00  
 Serial Number: XXXXXXXX  
 Calibration Date: 1/1/1997

**Diffuse Solar Radiation on a Horizontal Surface (Shadow Band PSP)**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Savannah State College - July 1999**

Field: DHI

Hour Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily
1	0	0	0	0	0	3	33	204	309	191	150	315	331	350	465	257	262	84	11	2	0	0	0	0	2966
2	0	0	0	0	0	14	77	151	264	306	115	282	221	277	279	176	161	124	49	7	0	0	0	0	2505
3	0	0	0	0	0	13	58	101	152	260	241	278	173	287	212	241	180	126	61	7	0	0	0	0	2389
4	0	0	0	0	0	7	36	165	157	313	221	297	308	306	213	186	136	90	64	6	0	0	0	0	2506
5	0	0	0	0	0	15	76	106	124	146	269	269	297	308	243	146	120	97	58	7	0	0	0	0	2281
6	0	0	0	0	0	9	83	128	171	209	271	426	323	328	363	122	85	55	19	4	0	0	0	0	2595
7	0	0	0	0	0	18	80	137	249	316	315	287	246	215	174	161	122	87	53	5	0	0	0	0	2466
8	0	0	0	0	0	11	69	107	125	136	166	213	237	298	285	224	151	109	60	5	0	0	0	0	2196
9	0	0	0	0	0	5	67	146	209	240	222	234	303	301	260	206	156	130	64	7	0	0	0	0	2549
10	0	0	0	0	0	9	53	83	90	132	155	178	250	259	264	182	151	41	27	20 ?	0	0	0	0	1893
11	0	0	0	0	0	5	54	86	96	193	288	381	399	108	341	285	223	150	28	1	0	0	0	0	2636
12	0	0	0	0	0	8	80	120	163	294	456	290	241	90	15	15	41	58	46	4	0	0	0	0	1920
13	0	0	0	0	0	2	69	137	219	143	205	174	234	308	250	377	254	177	23	0	0	0	0	0	2574
14	0	0	0	0	0	2	38	119	163	358	309	383	266	280	235	46	127	114	40	4	0	0	0	0	2483
15	0	0	0	0	0	4	49	177	190	301	295	310	120	378	157	51	145	131	48	5	0	0	0	0	2360
16	0	0	0	0	0	4	71	177	263	99	85	31	33	105	230	361	277	135	60	7	0	0	0	0	1938
17	0	0	0	0	0	8	62	147	257	221	267	336	282	346	345	326	183	113	27	2	0	0	0	0	2921
18	0	0	0	0	0	7	75	106	153	296	357	222	251	263	347	233	79	25	12	2	0	0	0	0	2428
19	0	0	0	0	0	4	47	80	115	175	157	230	556	372	329	256	150	87	45	4	0	0	0	0	2607
20	0	0	0	0	0	6	59	98	115	133	193	260	249	259	260	258	225	151	67	6	0	0	0	0	2339
21	0	0	0	0	0	5	80	163	224	275	284	313	358	386	390	359	296	193	66	4	0	0	0	0	3395
22	0	0	0	0	0	4	72	180	256	282	325	337	436	364	332	200	199	145	21	3	0	0	0	0	3156
23	0	0	0	0	0	4	78	161	227	317	362	442	383	408	336	278	231	146	62	5	0	0	0	0	3440
24	0	0	0	0	0	4	72	144	196	254	324	411	380	257	262	234	191	142	63	1	0	0	0	0	2936
25	0	0	0	0	0	5	66	130	231	381	421	495	495	417	248	288	298	124	24	4	0	0	0	0	3628
26	0	0	0	0	0	4	62	114	137	147	164	184	197	233	224	195	180	150	66	2	0	0	0	0	2059
27	0	0	0	0	0	5	78	148	178	217	236	230	232	240	297	351	205	125	48	2	0	0	0	0	2590
28	0	0	0	0	0	4	72	161	239	293	326	368	361	366	352	291	217	149	70	3	0	0	0	0	3274
29	0	0	0	0	0	4	68	154	214	238	283	299	341	366	337	288	221	151	65	1	0	0	0	0	3031
30	0	0	0	0	0	3	78	142	158	165	191	181	182	189	196	225	221	160	74	3	0	0	0	0	2168
31	0	0	0	0	0	2	74	189	219	251	391	334	279	249	242	213	191	150	69	1	0	0	0	0	2853
Avg	0	0	0	0	0	6	66	137	189	235	260	290	289	288	274	227	183	120	48	4	0	0	0	0	2616
S/D	0	0	0	0	0	4	14	32	55	74	88	93	103	83	82	89	61	39	19	3	0	0	0	0	445
S/A	0	0	0	0	0	0.62	0.21	0.23	0.29	0.31	0.34	0.32	0.36	0.29	0.3	0.39	0.33	0.32	0.39	0.82	0	0	0	0	0.17
Min	0	0	0	0	0	2	33	80	90	99	85	31	33	90	15	15	41	25	11	0	0	0	0	0	1893
Max	0	0	0	0	0	18	83	204	309	381	456	495	556	417	465	377	298	193	74	20	0	0	0	0	3628

Daylight Data Recovery: 0% missing; 0% exceed the 15% QC threshold -- 5222 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

Data and Flag	Hour Column	Day Column
<value>*	20% < Missing < 100%	10% < Missing < 100%
<value>?	20% < Fail QC < 100%	10% < Fail QC < 100%
<blank>*	100% Missing	100% Missing
<blank>?	100% Fail QC	100% Fail QC

Station: SS  
Latitude: 32.03° N  
Longitude: 81.07° W  
Elevation: 11 Meters AMSL  
Time Zone: -5

Instrument: PSP  
Calibration Constant: 7.53 uV/Wm-2  
Serial Number: 17862F3  
Calibration Date: 5/19/98